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Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: Thu Nov 08 14:09:22 EST 2007

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## Validated By CRFValidator v 1.0.3

Application No: 10727000 Version No: 2.0

Input Set:

Output Set:

**Started:** 2007-10-25 09:28:08.723 **Finished:** 2007-10-25 09:28:10.661

**Elapsed:** 0 hr(s) 0 min(s) 1 sec(s) 938 ms

Total Warnings: 19
Total Errors: 0

No. of SeqIDs Defined: 20

Actual SeqID Count: 20

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## SEQUENCE LISTING

<110> Ribaudo and Shields

<120> B2 Microglobulin Fusion Proteins and High Affinity Variants

<130> 67022

<140> 10727000

<141> 2003-12-02

<150> 09/719,243

<151> 2001-03-19

<150> PCT/US99/12309

<151> 1999-06-03

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<151> 1998-06-10

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<210> 1

<211> 119

<212> PRT

<213> Homo sapiens

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Gly Leu Glu Ala Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg

His Pro Ala Glu Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser 35 40 45

Gly Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu 50 55 60

Arg Ile Glu Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp 65 70 75 80

Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp
85 90 95

Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile 100 105 110

Val Lys Trp Asp Arg Asp Met

115

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Pro Cys Pro Phe Thr Lys Ala Gln Asn Ile Ser Leu Ser Glu Leu Val
            20
                               25
Val Phe Trp Gln Asp Gln Gln Lys Leu Val Leu Tyr Glu His Tyr Leu
        35
                            40
Gly Thr Glu Lys Leu Asp Ser Val Asn Ala Lys Tyr Leu Gly Arg Thr
                        55
Ser Phe Asp Arg Asn Asn Trp Thr Leu Arg Leu His Asn Val Gln Ile
65
                    70
                                        75
Lys Asp Met Gly Ser Tyr Asp Cys Phe Ile Gln Lys Lys Pro Pro Thr
Gly Ser Ile Ile Leu Gln Gln Thr Leu Thr Glu Leu Ser Val Ile Ala
                       105
           100
Asn Phe Ser Glu Pro Glu Ile Lys Leu Ala Gln Asn Val Thr Gly Asn
      115
                          120
Ser Gly Ile Asn Leu Thr Cys Thr Ser Lys Gln Gly His Pro Lys Pro
   130
                      135
                                          140
Lys Lys Met Tyr Phe Leu Ile Thr Asn Ser Thr Asn Glu Tyr Gly Asp
145
                   150
                                       155
Asn Met Gln Ile Ser Gln Asp Asn Val Thr Glu Leu Phe Ser Ile Ser
               165
                                   170
Asn Ser Leu Ser Leu Ser Phe Pro Asp Gly Val Trp His Met Thr Val
           180
                              185
Val Cys Val Leu Glu Thr Glu Ser Met Lys Ile Ser Ser Lys Pro Leu
       195
                        200
Asn Phe Thr Gln Glu Phe Pro Ser Pro Gln Thr Tyr Trp Ala Ser Thr
    210
                       215
                                          220
Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Ala Ser
225
                   230
                                       235
Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala Glu
               245
                                   250
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Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe His Pro

260 265 270

Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu Lys
275 280 285

Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr Leu 290 295 300

Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala Cys 305 310 315 320

Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp Asp 325 330 335

Arg Asp Met

<210> 3

<211> 358

<212> PRT

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<220>

<223> Description of Artificial Sequence: fusion protein

<400> 3

Met Ser Arg Ser Val Ala Leu Ala Val Leu Ala Leu Leu Ser Leu Ser 1 5 10 15

Gly Leu Glu Ala Val Ser Val Glu Thr Gln Ala Tyr Phe Asn Gly Thr
20 25 30

Ala Tyr Leu Pro Cys Pro Phe Thr Lys Ala Gln Asn Ile Ser Leu Ser 35 40 45

Glu Leu Val Val Phe Trp Gln Asp Gln Gln Lys Leu Val Leu Tyr Glu
50 60

His Tyr Leu Gly Thr Glu Lys Leu Asp Ser Val Asn Ala Lys Tyr Leu 65 70 75 80

Gly Arg Thr Ser Phe Asp Arg Asn Asn Trp Thr Leu Arg Leu His Asn
85 90 95

Val Gln Ile Lys Asp Met Gly Ser Tyr Asp Cys Phe Ile Gln Lys Lys 100 105 110

Pro Pro Thr Gly Ser Ile Ile Leu Gln Gln Thr Leu Thr Glu Leu Ser 115 120 125

Val Ile Ala Asn Phe Ser Glu Pro Glu Ile Lys Leu Ala Gln Asn Val 130 135 140

Thr Gly Asn Ser Gly Ile Asn Leu Thr Cys Thr Ser Lys Gln Gly His 145 150 155 160 Pro Lys Pro Lys Lys Met Tyr Phe Leu Ile Thr Asn Ser Thr Asn Glu 165 170 Tyr Gly Asp Asn Met Gln Ile Ser Gln Asp Asn Val Thr Glu Leu Phe 185 Ser Ile Ser Asn Ser Leu Ser Leu Ser Phe Pro Asp Gly Val Trp His 195 200 Met Thr Val Val Cys Val Leu Glu Thr Glu Ser Met Lys Ile Ser Ser 210 215 220 Lys Pro Leu Asn Phe Thr Gln Glu Phe Pro Ser Pro Gln Thr Tyr Trp 230 235 Ala Ser Thr Ser Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly 245 250 Gly Ala Ser Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg His 265 Pro Ala Glu Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly 280 275 Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu Arg 290 295 Ile Glu Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser 305 310 315 Phe Tyr Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu 325 330 Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile Val 345 Lys Trp Asp Arg Asp Met 355 <210> 4 <211> 24 <212> DNA <213> Artificial Sequence <223> Description of Artificial Sequence: primer <400> 4 ttcttcagca aggactggtc tttc 24 <210> 5 <211> 24 <212> DNA

<213> Artificial Sequence

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attttcagca aggactggtc tttc
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gtgttcagca aggactggtc tttc
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<223> Description of Artificial Sequence: primer
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taagtctgaa tgctccactt tttc
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<210> 8
<211> 31
<212> DNA
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agggtaccat ggtttccgtg gagacgcaag c
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<223> Description of Artificial Sequence: primer
tcgaattcat gatgctagcc caatacgttt gaggagatgg
                                                                    40
<210> 10
<211> 99
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      S55V
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<400> 10
Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala Glu
Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe His Pro
            20
                                 25
Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu Lys
                            40
Val Glu His Ser Asp Leu Val Phe Ser Lys Asp Trp Ser Phe Tyr Leu
     50
                       55
Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala Cys
                    70
                                        75
Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp Asp
                                     90
Arg Asp Met
<210> 11
<211> 15
<212> PRT
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<223> Description of Artificial Sequence: linker that
      can be used in fusion proteins
Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
                5
<210> 12
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<223> Description of Artificial Sequence: linker that
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Gly Gly Gly Ala Ser
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<213> Artificial Sequence

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Lys Tyr Leu Leu Pro Thr Ala Ala Gly Leu Leu Leu Ala Ala
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Gln Pro Ala Met Ala
            20
<210> 14
<211> 20
<212> PRT
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<223> Description of Artificial Sequence: signal peptide
<400> 14
Met Arg Ala Lys Leu Gly Ile Val Leu Thr Pro Ile Ala Ile Ser
                                    10
                                                        15
Phe Ala Ser Thr
<210> 15
<211> 11
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: c-myc tag
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Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn
        5
<210> 16
<211> 9
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: ornithine
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Ser Ser Glu Gln Thr Phe Met Tyr Tyr
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                 5
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<212> PRT

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<213> Artificial Sequence
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<223> Description of Artificial Sequence: HIV gag 77-85
Ser Leu Tyr Asn Thr Val Ala Thr Leu
<210> 19
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<223> Description of Artificial Sequence: pn2a.A3
<400> 19
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<223> Description of Artificial Sequence: influenza NP
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